*AMENDMENTS TO THE CLAIMS*

1.      (Currently Amended)  A method for <u>an application server in a visited network</u> ~~a roaming user~~ to establish a security association with <u>a user</u> ~~an application server in a visited network~~, comprising the steps of:

receiving, by <u>the application server in the visited network,</u> ~~receiving~~ a service request message from the ~~roaming~~ user, said service request message containing a Bootstrapping-Transaction Identifier (B-TID), the B-TID being assigned to the ~~roaming~~ user by a Bootstrapping Server Function (BSF) based upon a mutual authentication of the ~~roaming~~ user with the BSF that performs user identity initial verification in a generic authentication architecture in a home network of the ~~roaming~~ user;

inquiring, by <u>the application server in the visited network,</u> ~~inquiring~~ from <u>a proxy</u> ~~an authentication entity~~ in the visited network about ~~the roaming user's~~ user information <u>of the user</u> associated with the B-TID, the user information comprising user authentication results of the generic authentication architecture in the ~~roaming user's~~ home network <u>of the user</u>;

identifying, by <u>the proxy in the visited network,</u> ~~authentication entity finding out~~ the home network to which the user belongs according to the B-TID;

acquiring, by <u>the proxy in the visited network,</u> ~~authentication entity acquiring~~ the user information associated with the B-TID from the BSF in the ~~roaming user's~~ home network <u>of the user</u>; ~~, and~~

returning, by <u>the proxy in the visited network,</u> the acquired user information to the application server;

obtaining, by <u>the application server in the visited network,</u> ~~obtaining~~ the ~~roaming user's~~ user information <u>of the user</u> comprising the user authentication results of the generic authentication architecture in the ~~roaming user's~~ home network <u>of the user</u>; and

establishing, by the application server in the visited network, establishing a security

association with the roaming user according to the user authentication results of the generic

authentication architecture in the roaming user's home network of the user.

2.      (Canceled)

3.      (Currently Amended)  The method according to Claim 1, wherein the authentication

entity in the visited network is a BSF or a generic authentication architecture proxy in the

visited network;

the step of the BSF or the generic authentication architecture proxy in the visited

network acquiring the user information associated with the B-TID from the roaming user's

home network of the user comprises:

the BSF or the generic authentication architecture proxy in the visited network

directly sending, by the proxy in the visited network, a query message to the BSF in the

roaming user's home network of the user to inquire , inquiring about the user information

associated with the B-TID; and

obtaining, by the proxy in the visited network, the user information associated with

the B-TID from the response message returned by the BSF in the roaming user's home

network of the user.

4.      (Currently Amended)  The method according to Claim 3, wherein the generic

authentication architecture proxy in the visited network is an independent server, or a server

combined with an authentication, authorization and accounting (AAA) server in the local

visited network, or a server combined with the application server in the visited local network.

5-6.    (Canceled)

7.      (Currently Amended)  The method according to Claim 1, wherein the user

information comprises at least: key information and an identity of the user user's identity.

8-9.    (Canceled)

10.     (Currently Amended)  The method according to Claim 7, wherein the user

information [[also]] further comprises [[the]] profile information associated with security.

11-12. (Canceled)

13.     (Currently Amended)  The method according to Claim 7, wherein the key information

is a shared key (Ks) generated in the mutual authentication, or a derived key of the Ks Ks-

derived key and [[its]] a valid term of the derived key.

14-15. (Canceled)

16.     (Currently Amended)  An application server in a communication network comprising

a home network and a visited network of a roaming user, comprising:

        circuitry adapted for receiving configured to receive a service request message from

the roaming user containing a Bootstrapping-Transaction Identifier (B-TID) from a user, the

B-TID being assigned to the roaming user by a Bootstrapping Server Function (BSF) based

upon a mutual authentication of the roaming user with the BSF that performs user identity

initial verification in a generic authentication architecture in [[the]] a home network of the

roaming user;

        circuitry adapted for inquiring configured to inquire from a proxy in a visited network

an authentication entity about an authentication in the visited network to obtain the roaming

user's user information of the user associated with the B-TID; the roaming user's user

information of the user comprising user authentication results of the generic authentication

architecture in the ~~roaming user's~~ home network of the user;

circuitry ~~adapted for obtaining~~ configured to obtain the ~~roaming user's~~ user information of the user from the proxy in the visited network ~~authentication entity~~ after the proxy in the visited network ~~authentication entity finds out~~ identifies the home network to which the user belongs according to the B-TID and acquires the user information associated with the B-TID from the BSF in the ~~roaming user's~~ home network of the user; and

circuitry ~~adapted for establishing~~ configured to establish a security association with the ~~roaming~~ user according to the user authentication results of the generic authentication architecture in the ~~roaming user's~~ home network of the user.

17.    (Currently Amended)  The application server ~~accoring~~ according to Claim 16, wherein the user information comprises at least: key ~~informaitn~~ information and ~~the user's~~ an identity of the user.

18.    (Currently Amended)  A communication system, comprising:

an application server in a visited network, the application server configured to receive a service request message containing a Bootstrapping-Transaction Identifier (B-TID) from a user, the B-TID being assigned to the user by a Bootstrapping Server Function (BSF) based upon a mutual authentication of the user with the BSF that performs user identity initial verification in a generic authentication architecture in a home network of the user, obtain the user information of the user from a proxy in the visited network, and establish a security association with the user according to the user authentication results of the generic authentication architecture in the home network of the user; and

the proxy configured to identify the home network to which the user belongs according to the B-TID, acquire the user information associated with the B-TID from the

BSF in the home network of the user, and return the acquired user information to the application server. ~~according to any of claims 16-17, wherein the application server is connected with the authentication entity, and the authentication entity comprises circuitry adapted for finding out a user's home network entity.~~

19.     (Canceled)

*This listing of claims replaces all prior versions, and listings, of claims in the application.*